

Inside the Clearwater Blend Reporting the Water Quality Standards You Requested

Want to know the details about the quality of your new blended water? With the help of many of our customers and our community partners (see next page), Tucson Water will begin making water quality information about blended water available soon after delivery of the new water begins.

In December and January we asked you, our customers, to tell us what water quality information about the blend you would like to see and how best to get that information to you. You'll see these reports each month in this newsletter, as well as on our website, and through other methods that you requested.

You asked us to report on the following standards for the Clearwater blend -

- Bacteria •
- Chlorine •
- Total Dissolved Solids •
- Hardness •
- Sodium •

We'll also report on the temperature, pH, and other aspects of the blend here or on our website.

For more information, visit Tucson Water's website at www.ci.tucson.az.us/water/ or call 791-4331.

1900 - 2001
100 Years of Serving Tucson

Your Water Connection

SPECIAL Blended Water Issue

**Inside: Information
about your
new blended water**

Very soon,
Tucson Water will
begin adding
blended water from
its new Clearwater
Facility to Tucson's
water distribution
system.

April 2001 <http://www.ci.tucson.az.us/water/>

What's "The Blend"?

The water that will be delivered from the Clearwater Facility in late April is a blend of recharged Colorado River water and groundwater.

Water from the Central Arizona Project canal is put into special basins and allowed to "recharge" – soak down through the earth until it reaches the water table. There it blends naturally with the native groundwater. It is then pumped to the Clearwater Reservoir and boosted through the Clearwater pipeline to Tucson. The blend is added

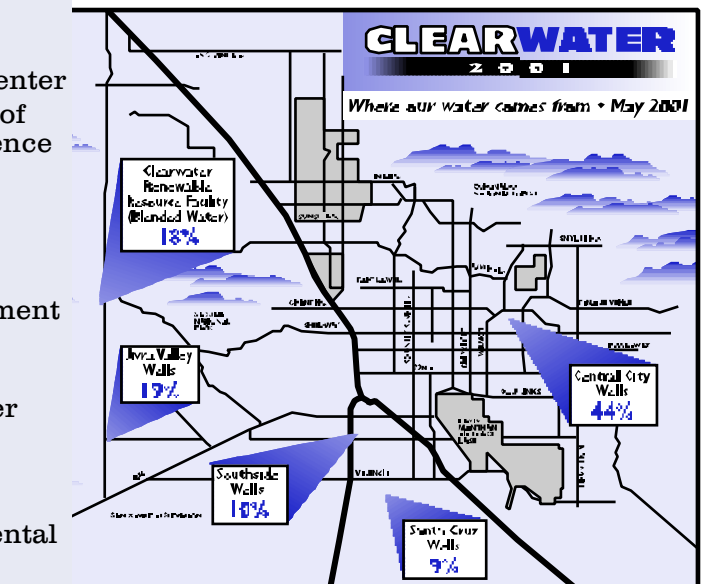
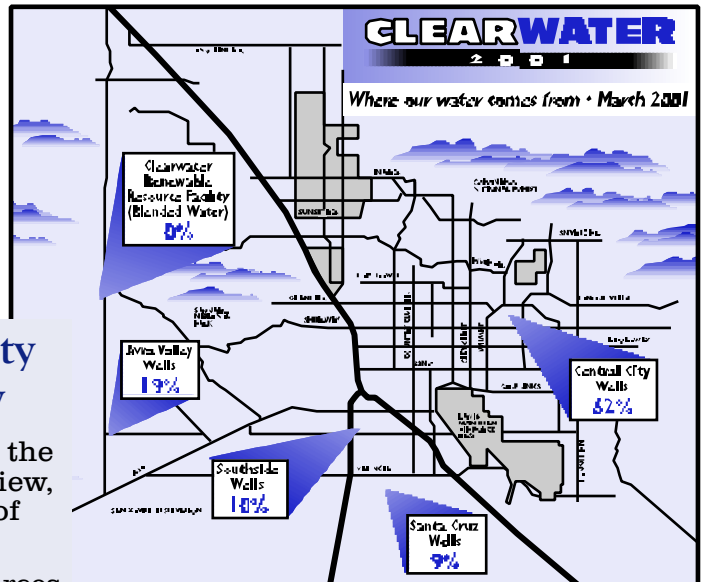
to our water distribution system where it mixes with the groundwater from other wells that is already in the water mains and city reservoirs.

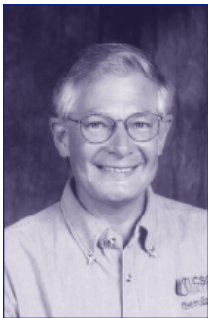
During 2001, about 18% of the water we use will be blended water from Clearwater. That percentage will rise to more than 50% by 2003 as Tucson Water expands the Clearwater Facility.

Tucson Water's Community Partners on Water Quality

Tucson Water has partnered with the following local organizations to review, report, and track the water quality of our new blended water.

- University of Arizona Water Resources Research Center
- University of Arizona Southwest Environmental Health Sciences Center
- University of Arizona Department of Soils, Water & Environmental Science
- Tucson Unified School District
- Tucson-Pima Public Library
- Tucson Hispanic Chamber of Commerce
- Pima County Wastewater Management Department
- Pima County Health Department
- National Science Foundation Water Quality Center
- City of Tucson Citizen and Neighborhood Services Office
- Arizona Department of Environmental Quality





On the Water Front



Tucson Water will begin delivery of our new blended water from the Clearwater Renewable Resource Facility to our customers very soon. I'd like to explain to you what we've done to ensure this new water will be of the highest quality.

During the past several years, Tucson Water has done scientific research, improved our water delivery system, and worked closely with our customers to make sure that the blended water from Clearwater will be as good or better than the groundwater we're all used to.

Gradual Introduction

Blended water will be introduced to the City's water distribution system gradually over a period of years, and will be re-blended with groundwater from our other existing wellfields while it is in the water system.

Main Replacement

Over the past seven years, Tucson Water has replaced or refurbished more than 220 miles of old, rusted water mains throughout the water distribution system. Our water distribution system is now renovated and ready to deliver Clearwater.

Maintaining the Direction of Flow and Pressure

The direction of flow of the blended water through the City's water distribution system and the pressure it is delivered at will match the current direction and pressure of groundwater flow. This will ensure there is no "scouring" of

the inside of our water mains that can occur when flows and pressures are changed.

Adjusting the pH

Corrosion studies conducted by Tucson Water scientists during the past several years as part of the At The Tap program determined that relative pH (acid balance) is the most critical factor in preventing colored water problems. To prevent corrosion, Tucson Water will slowly adjust the pH of the blended water to 8.5 to make sure that the blend is less corrosive than the groundwater we have been using.

Demonstrating the Blend

In 1999 and 2000 Tucson Water demonstrated the quality and acceptability of our new blended water by delivering it to four volunteer neighborhoods for 90 days each. Our customer volunteers found the water to be of good quality. There were no taste or odor problems reported, nor were there any problems with plumbing or household appliances.

This research, planning, and demonstration has been done to make sure blended water is acceptable to you, our customers. The addition of Clearwater as a new water resource for Tucson will ensure we have enough quality water for our families and ourselves in the future.

David V. Modeer
Director, Tucson Water

Visit the Tucson Water Web Site at <http://www.ci.tucson.az.us/water/>



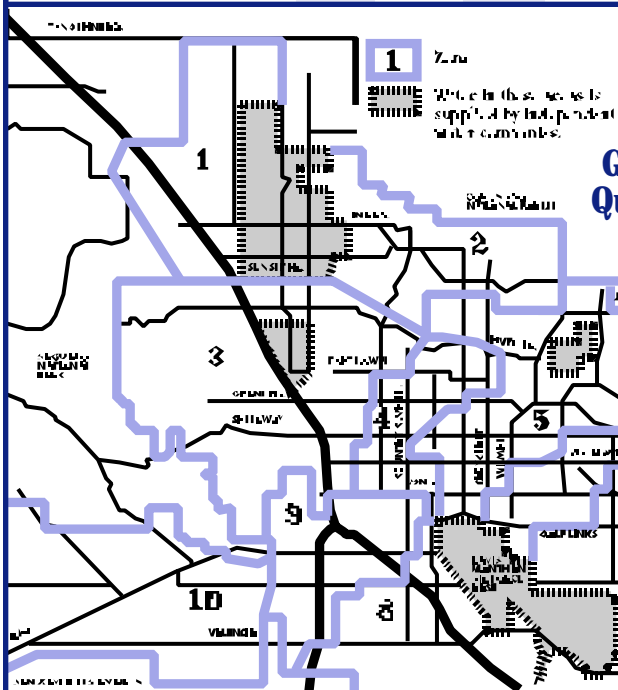
The Water Connection is produced by Tucson Water.
To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to:
Customer Information
P.O. Box 27210
Tucson, AZ 85726-7210

City of Tucson
TTY number: 791-2639

Para recibir esta información en español, sírvase llamar al 791-4331.

GROUNDWATER QUALITY REPORT - January 2001

Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (ppm)	Average	52	40	44	38	34	31	26	41	67	38	40
	Range	51-52	37-44	25-65	28-67	24-41	26-34	24-28	35-46	37-190	37-39	24-190
Mineral Content (ppm)	Average	419	280	280	236	242	225	210	320	313	214	264
	Range	190-552	240-303	164-465	184-468	162-293	198-278	175-263	264-421	207-766	205-229	162-766
Hardness (ppm)	Average	227	126	125	103	105	108	97	152	106	78	116
	Range	133-320	108-133	69-230	72-237	68-129	103-114	85-113	109-198	78-132	77-78	68-320
pH (units)	Average	7.8	8.1	8.0	8.0	7.9	7.9	8.0	7.8	8.0	8.0	8.0
	Range	7.5-8.4	7.9-8.3	7.2-8.4	7.7-8.2	7.6-8.2	7.4-8.1	7.7-8.2	7.5-8.0	7.8-8.3	8.0-8.2	7.2-8.4
Temperature (deg F)	Average	66	67	67	71	68	65	67	69	71	69	68
	Range	59-71	59-78	59-76	63-79	59-80	53-72	57-76	61-78	61-88	64-82	53-88



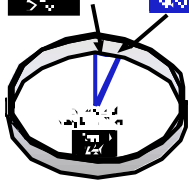
COLIFORM BACTERIA Testing Results - Jan 2001

Groundwater Quality Report



TPH Standard for Positive Samples
5%

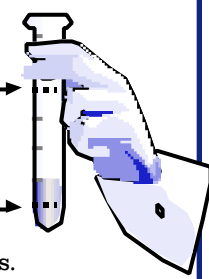
Number of Positive Samples for Total Coliform
0%



Chlorine Level Average

Chlorine Level Average

Monthly Average
0.9 ppm



One part per million (ppm) is the same as one second of time in 11.6 days.

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10

zones based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.